# SPECIAL PERMIT APPLICATION 22-24 MAIN STREET

MAYNARD, MASSACHUSETTS Prepared for GreenStar Herbals

<u>APPLICANT:</u> GreenStar Herbals, Inc. 310 Flagg Hill Road Boxborough, MA 01719

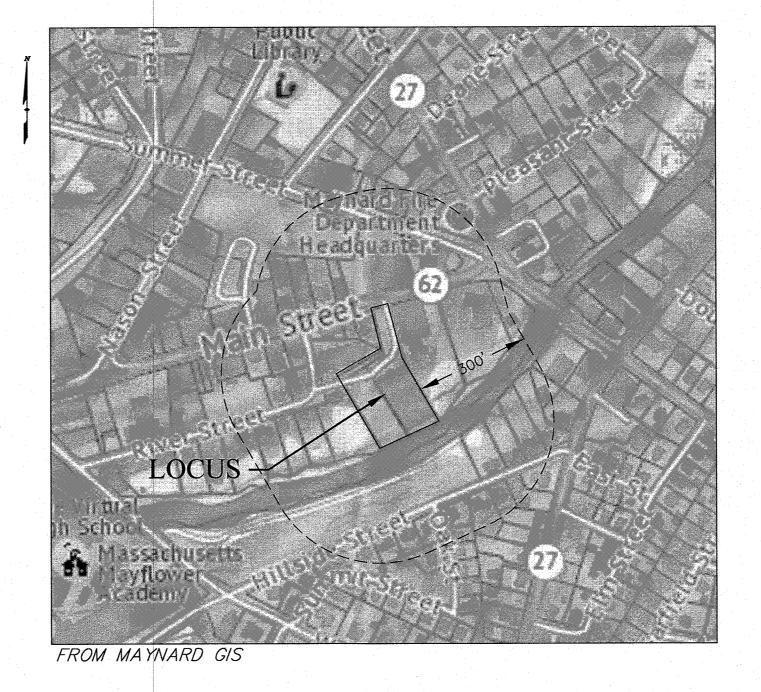
Greenley Place Realty Trust Robert J. Watson, Trustee 24 Maibn Street Maynard, MA 01754

PLANNER, LANDSCAPE ARCHITECT, CIVIL ENGINEER & SURVEYOR: Places Associates, Inc. 256 Great Road, Suite 4 Littleton, MA 01460

Caveney Architectural Collaborative, Inc. 128 Warren Street Lowell, MA 01852



LOCUS SCALE: 1" = 250'



LOCUS SCALE: 1" = 250'

# SHEET INDEX

- EXISTING CONDITIONS PLAN
- C-2 DEMO/REMEDIATION PLAN
- C-3 SITE AND LAYOUT PLAN
- C-4 LANDSCAPE PLAN
- CONSTRUCTION DETAILS
- EROSION CONTROL & DRAINAGE SYSTEM OPERATIONS

MAYNARD PLANNING BOARD
GREG TUZZOLO, CHAIR
ANDRREW D'AMOUR, VICE CHAIR
JIM COLEMAN
CHRIS ARSENAULT
BILL CRANSHAW
APPROVAL DATE
ENDORSEMENT DATE

TOWAL	OLEDIA			
,			 	

ZONING COMPLIANCE CB, CENTRAL BUSINESS DISTRICT

DOWNTOWN OVERLAY DISTRICT								
	REQUIRED	EXISTING	PROPOSED					
LOT AREA	0 SF	1± AC	Unchanged					
FRONTAGE (MIN)	0'	46'±	Unchanged					
LOT WIDTH (MIN)	0'	173 <b>'</b> ±	Unchanged					
FRONT YARD (MIN)	0'	166'±	Unchanged					
SIDE YARD (MIN)	0'	0'	Unchanged					
REAR YARD (MIN)	0'	0'	Unchanged					
LOT COVERAGE								
BUILDING/STRUCTURES	N/A	15,580 SF	Unchanged					
IMPERVIOUS	N/A	23,200 SF	Unchanged					
FLOOR TO AREA	N/A	35%±	Unchanged					
BUILDING HEIGHT (MAX)	40'	<40'	Unchanged					

PERMIT SET 6-4-2019(REV) Sheets c-2, C-3 and C-5 have beer revised on June 21, 2019

COVER

OCATION: 22-24 MAIN STREET TOWN: MAYNARD, MASSACHUSETTS

> GreenStar HERBALS



DATE: MARCH 28, 2019

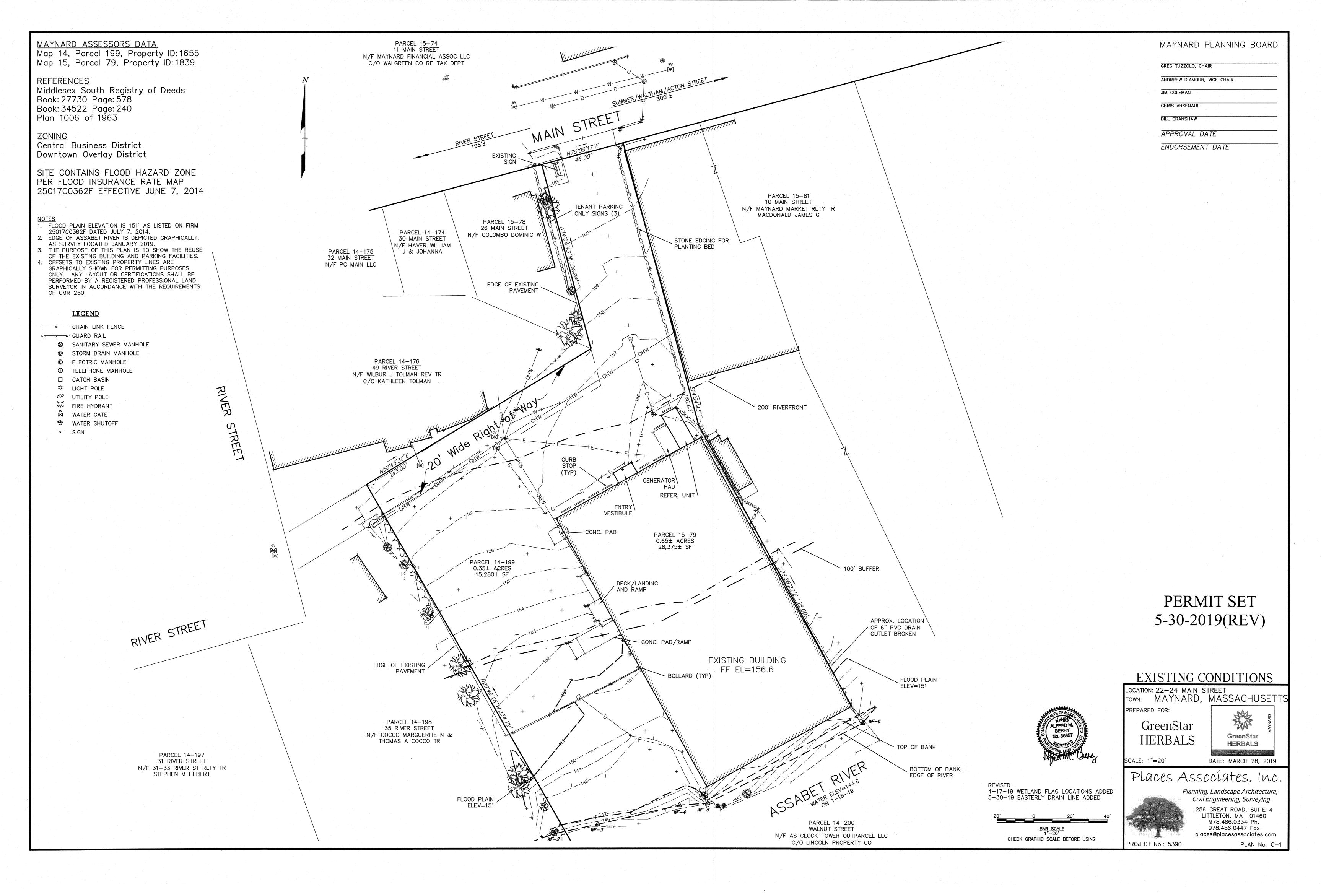
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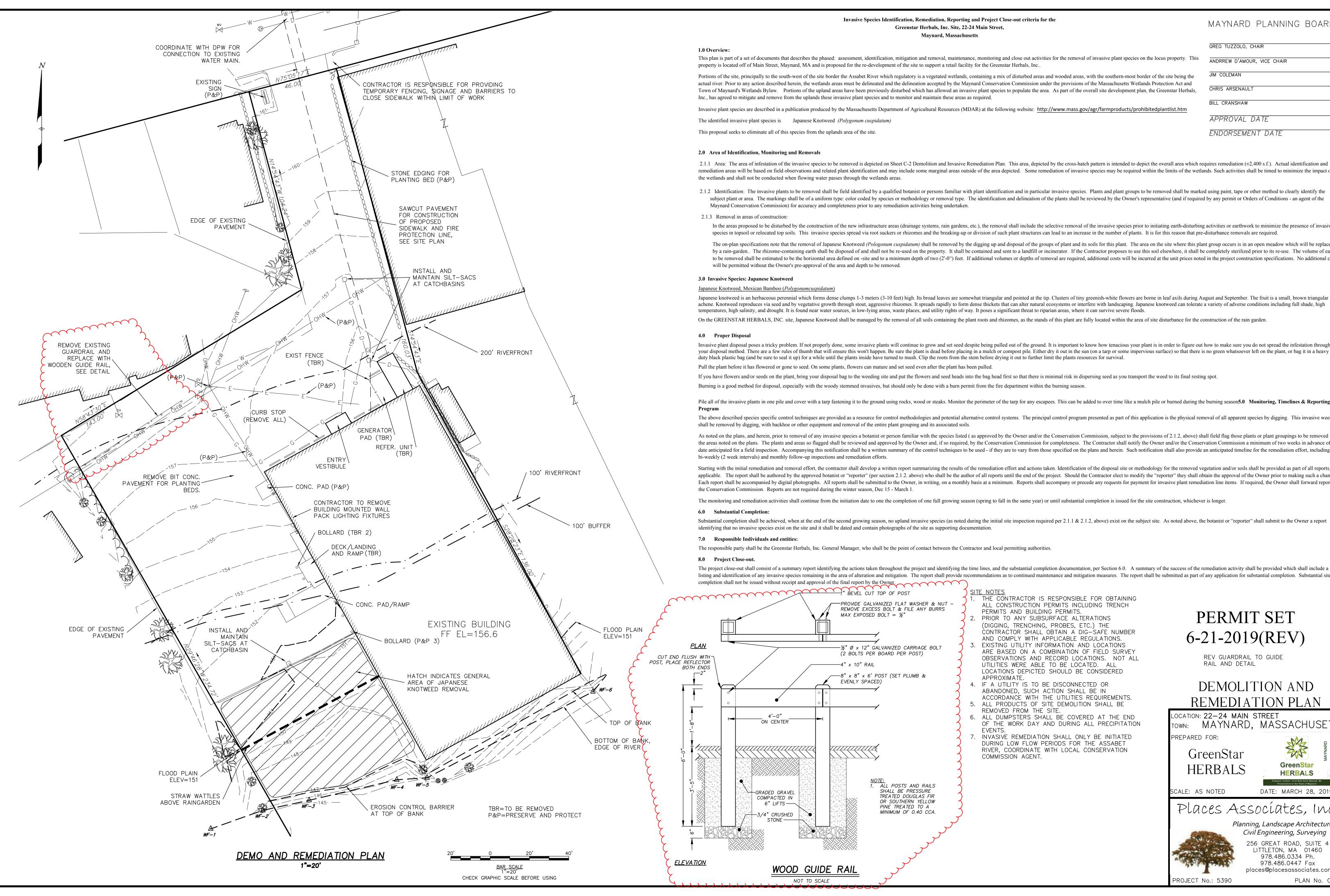
Planning, Landscape Architecture, Civil Engineering, Surveying

256 GREAT ROAD, SUITE 4 LITTLETON, MA 01460 978.486.0334 Ph. 978.486.0447 Fax

PLAN No. 5390-COVER

6-4-19 NOI AND PEER REVIEW COMMENTS





## Invasive Species Identification, Remediation, Reporting and Project Close-out criteria for the

Portions of the site, principally to the south-west of the site border the Assabet River which regulatory is a vegetated wetlands, containing a mix of disturbed areas and wooded areas, with the southern-most border of the site being the

actual river. Prior to any action described herein, the wetlands areas must be delineated and the delineation accepted by the Maynard Conservation Commission under the provisions of the Massachusetts Wetlands Protection Act and Town of Maynard's Wetlands Bylaw. Portions of the upland areas have been previously disturbed which has allowed an invasive plant species to populate the area. As part of the overall site development plan, the Greenstar Herbals,

Invasive plant species are described in a publication produced by the Massachusetts Department of Agricultural Resources (MDAR) at the following website: http://www.mass.gov/agr/farmproducts/prohibitedplantlist.htm

2.1.1 Area: The area of infestation of the invasive species to be removed is depicted on Sheet C-2 Demolition and Invasive Remediation Plan. This area, depicted by the cross-hatch pattern is intended to depict the overall area which requires remediation (±2,400 s.f.). Actual identification and remediation areas will be based on field observations and related plant identification and may include some marginal areas outside of the area depicted. Some remediation of invasive species may be required within the limits of the wetlands. Such activities shall be timed to minimize the impact on

2.1.2 Identification: The invasive plants to be removed shall be field identified by a qualified botanist or persons familiar with plant identify the subject plant or area. The markings shall be of a uniform type: color coded by species or methodology or removal type. The identification and delineation of the plants shall be reviewed by the Owner's representative (and if required by any permit or Orders of Conditions - an agent of the

In the areas proposed to be disturbed by the construction of the new infrastructure areas (drainage systems, rain gardens, etc.), the removal shall include the selective removal of the invasive species prior to initiating earth-disturbing activities or earthwork to minimize the presence of invasive species in topsoil or relocated top soils. This invasive species spread via root suckers or rhizomes and the breaking-up or division of such plant structures can lead to an increase in the number of plants. It is for this reason that pre-disturbance removals are required.

The on-plan specifications note that the removal of Japanese Knotweed (Pologonum cuspidatum) shall be removed by the digging up and disposal of the groups of plant and its soils for this plant. The area on the site where this plant group occurs is in an open meadow which will be replaced by a rain-garden. The rhizome-containing earth shall be disposed of and shall not be re-used on the property. It shall be completely sterilized prior to its re-use. The volume of earth to be removed shall be estimated to be the horizontal area defined on -site and to a minimum depth of two (2'-0") feet. If additional costs will be incurred at the unit prices noted in the project construction specifications. No additional costs

achene. Knotweed reproduces via seed and by vegetative growth through stout, aggressive rhizomes. It spreads rapidly to form dense thickets that can alter natural ecosystems or interfere with landscaping. Japanese knotweed can tolerate a variety of adverse conditions including full shade, high temperatures, high salinity, and drought. It is found near water sources, in low-lying areas, waste places, and utility rights of way. It poses a significant threat to riparian areas, where it can survive severe floods.

On the GREENSTAR HERBALS, INC. site, Japanese Knotweed shall be managed by the removal of all soils containing the plant roots and rhizomes, as the stands of this plant are fully located within the area of site disturbance for the construction of the rain garden.

Invasive plant disposal poses a tricky problem. If not properly done, some invasive plants will continue to grow and set seed despite being pulled out of the ground. It is important to know how tenacious your plant is in order to figure out how to make sure you do not spread the infestation through your disposal method. There are a few rules of thumb that will ensure this won't happen. Be sure the plant is dead before placing in a mulch or compost pile. Either dry it out in the sun (on a tarp or some impervious surface) so that there is no green whatsoever left on the plant, or bag it in a heavy

If you have flowers and/or seeds on the plant, bring your disposal bag to the weeding site and put the flowers and seed heads into the bag head first so that there is minimal risk in dispersing seed as you transport the weed to its final resting spot.

Burning is a good method for disposal, especially with the woody stemmed invasives, but should only be done with a burn permit from the fire department within the burning season.

Pile all of the invasive plants in one pile and cover with a tarp fastening it to the ground using rocks, wood or steaks. Monitor the perimeter of the tarp for any escapees. This can be added to over time like a mulch pile or burned during the burning season5.0 Monitoring, Timelines & Reporting

The above described species specific control techniques are provided as a resource for control methodologies and potential alternative control systems. The principal control program presented as part of this application is the physical removal of all apparent species by digging. This invasive weed

As noted on the plans, and herein, prior to removal of any invasive species a botanist or person familiar with the species listed (as approved by the Owner and/or the Conservation Commission, subject to the provisions of 2.1.2, above) shall field flag those plants or plant groupings to be removed in the areas noted on the plans. The plants and areas so flagged shall be reviewed and approved by the Conservation Commission for completeness. The Contractor shall notify the Owner and/or the Conservation Commission a minimum of two weeks in advance of the date anticipated for a field inspection. Accompanying this notification shall be a written summary of the control techniques to be used - if they are to vary from those specified on the plans and herein. Such notification shall also provide an anticipated timeline for the remediation effort, including

applicable. The report shall be authored by the approved botanist or "reporter" (per section 2.1.2. above) who shall be the author of all reports until the end of the project. Should the Contractor elect to modify the "reporter" they shall obtain the approval of the Owner prior to making such a change. Each report shall be accompanied by digital photographs. All reports shall be submitted to the Owner, in writing, on a monthly basis at a minimum. Reports shall accompany or precede any requests for payment for invasive plant remediation line items. If required, the Owner shall forward reports to

Substantial completion shall be achieved, when at the end of the second growing season, no upland invasive species (as noted during the initial site inspection required per 2.1.1 & 2.1.2, above) exist on the subject site. As noted above, the botanist or "reporter" shall submit to the Owner a report

The responsible party shall be the Greenstar Herbals, Inc. General Manager, who shall be the point of contact between the Contractor and local permitting authorities.

The project close-out shall consist of a summary report identifying the actions taken throughout the project and identifying the time lines, and the substantial completion documentation, per Section 6.0. A summary of the success of the remediation activity shall be provided which shall include a listing and identification of any invasive species remaining in the area of alteration and mitigation. The report shall be submitted as part of any application for substantial completion. Substantial site

> THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS INCLUDING TRENCH

PERMITS AND BUILDING PERMITS. PRIOR TO ANY SUBSURFACE ALTERATIONS (DIGGING, TRENCHING, PROBES, ETC.) THE CONTRACTOR SHALL OBTAIN A DIG-SAFE NUMBER

AND COMPLY WITH APPLICABLE REGULATIONS. EXISTING UTILITY INFORMATION AND LOCATIONS ARE BASED ON A COMBINATION OF FIELD SURVEY OBSERVATIONS AND RECORD LOCATIONS. NOT ALL UTILITIES WERE ABLE TO BE LOCATED. ALL LOCATIONS DEPICTED SHOULD BE CONSIDERED

- . IF A UTILITY IS TO BE DISCONNECTED OR ABANDONED, SUCH ACTION SHALL BE IN ACCORDANCE WITH THE UTILITIES REQUIREMENTS.
- REMOVED FROM THE SITE. 6. ALL DUMPSTERS SHALL BE COVERED AT THE END OF THE WORK DAY AND DURING ALL PRECIPITATION
- INVASIVE REMEDIATION SHALL ONLY BE INITIATED DURING LOW FLOW PERIODS FOR THE ASSABET RIVER, COORDINATE WITH LOCAL CONSERVATION COMMISSION AGENT.

# PERMIT SET 6-21-2019(REV)

MAYNARD PLANNING BOARD

GREG TUZZOLO, CHAIR

JIM COLEMAN

CHRIS ARSENAULT

BILL CRANSHAW

APPROVAL DATE

ENDORSEMENT DATE

ANDRREW D'AMOUR, VICE CHAIR

REV GUARDRAIL TO GUIDE RAIL AND DETAIL

### DEMOLITION AND REMEDIATION PLAN

OCATION: 22-24 MAIN STREET TOWN: MAYNARD, MASSACHUSETTS REPARED FOR:

GreenStar HERBALS

SCALE: AS NOTED

**HERBALS** 

**GreenStar** 

DATE: MARCH 28, 2019

## Places Associates, Inc.

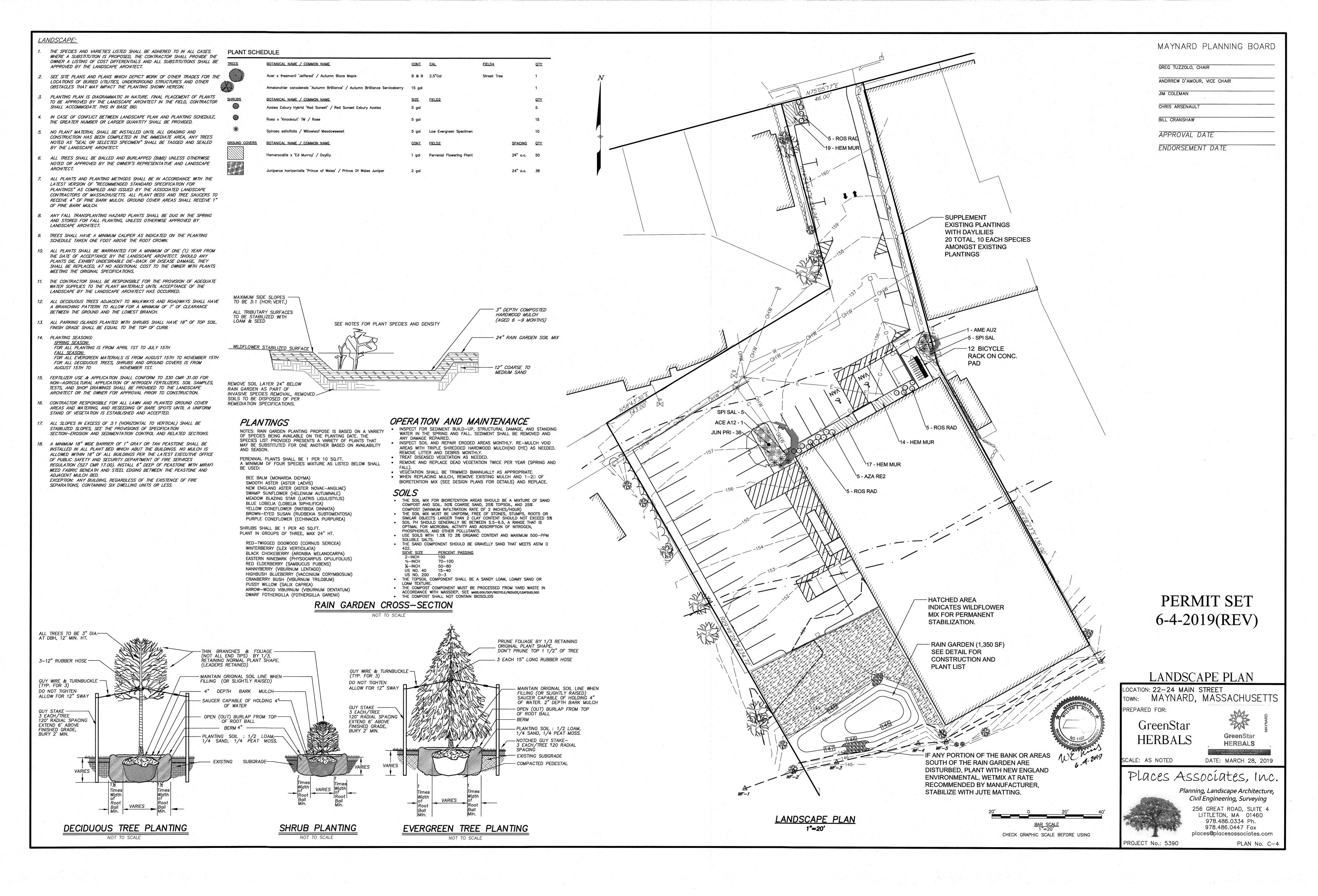


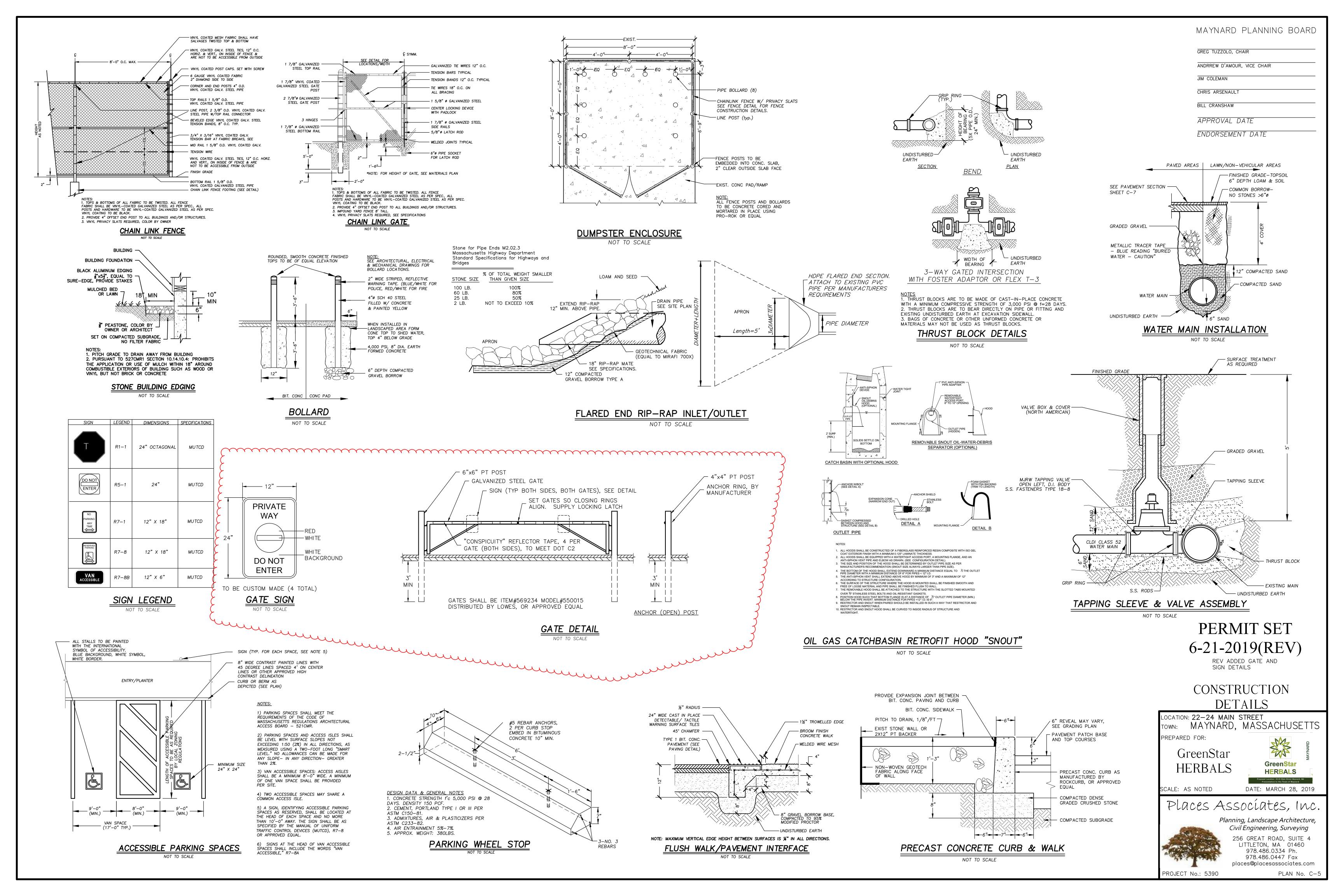
Civil Engineering, Surveying 256 GREAT ROAD, SUITE 4 LITTLETON, MA 01460 978.486.0334 Ph. 978.486.0447 Fax places@placesassociates.com

Planning, Landscape Architecture,

PLAN No. C-2







## DRAINAGE SYSTEM OPERATIONS & MAINTENANCE PLAN

#### STORM WATER COLLECTION SYSTEM:

THE STORMWATER COLLECTION SYSTEM SERVING THIS SITE IS INTENDED TO BOTH COLLECT STORM WATER RUNOFF AND TO PROVIDE TREATMENT OF THE STORMWATER. THIS SYSTEM COLLECTS RUNOFF GENERATED FROM THE SITE THROUGH THE USE OF CATCHBASINS. EACH CATCHBASIN IS EQUIPPED WITH AN OIL/GAS TRAP (WHICH PREVENTS THE INTRUSION OF HYDROCARBONS AND OTHER FLOATING MATERIALS FROM ENTERING THE DRAINAGE SYSTEM). WHEN THESE TWO BASIC CONTROL MECHANISMS ARE FUNCTIONING PROPERLY THEY PROVIDE FOR A REDUCTION OF CONTAMINANTS AND DEBRIS ENTERING THE STORMWATER COLLECTION AND RECHARGE SYSTEMS, AND THEREFORE DOWNSTREAM RECEIVING WATERS/WETLANDS.

THIS SITE IS ALSO BE SERVED BY A RAINGARDEN WHICH COLLECTS THE GENERATED RUNOFF AND RECHARGES IT TO THE GROUND, THUS PROVIDING RECHARGE SIMILAR TO THAT OF THE PRE-DEVELOPMENT CONDITION AND FILTERING THE RUNOFF AS IT TRAVELS THROUGH THE EXISTING SOILS TO THE GROUNDWATER TABLE.

BOTH OF THE ABOVE-DESCRIBED SYSTEMS RELY UPON PROPER MONITORING, OPERATIONS AND MAINTENANCE TO FUNCTION AS DESIGNED AND INTENDED. A PROGRAM OF MONITORING. OPERATIONS AND MAINTENANCE MUST BE ONGOING THROUGHOUT THE LIFE AND USE OF THE SITE, AND IS THE OWNER'S RESPONSIBILITY SOLELY. THESE ACTIVITIES, AS DESCRIBED BELOW, ARE TO BE INITIATED AFTER COMPLETION OF THE PROJECT AND ARE NOT RELATED TO THE CONSTRUCTION OF THE SITE, EXCEPT AS SPECIFICALLY PROVIDED. THIS PLAN IS SPECIFICALLY FOR SITE-RELATED ACTIVITIES, NOT ACTIVITIES WHICH ARE INTERIOR TO BUILDINGS, THOUGH THERE ARE NECESSARY IMPLICATIONS AND CORRELATION'S BETWEEN THE

#### **MONITORING:**

THE DRAINAGE SYSTEMS ARE REQUIRED TO BE MONITORED BY THE PROPERTY OWNER, WHO SHALL DIRECT AN INDIVIDUAL TO ACT AS THE SYSTEM'S MANAGER. THE NAME, ADDRESS AND DAY AND NIGHT (OR EMERGENCY) TELEPHONE NUMBER OF THIS PERSON OR ENTITY SHALL BE PROVIDED TO THE TOWN PRIOR TO THE ISSUANCE OF A CERTIFICATE OF COMPLIANCE FOR THE SITE CONSTRUCTION. THIS INDIVIDUAL SHALL BE REQUIRED TO KEEP A LOG OF ALL REQUIRED INSPECTIONS, OBSERVATIONS AND MAINTENANCE ACTIVITIES DRAINAGE SYSTEM COMPONENTS SHALL BE REFERRED TO BY SPECIFIC LOCATION OR THE DESIGN PLAN DESIGNATION, (E.G. CTB # 10 ) TO AVOID CONFUSION OR MISIDENTIFICATION THE LOG SHALL BE MADE AVAILABLE TO THE TOWN WITHIN TEN (10) DAYS OF A WRITTEN REQUEST BY THAT

#### MONITORING FOR THIS SITE SHALL CONSIST OF THE FOLLOWING:

1. ALL CATCHBASINS SHALL BE INSPECTED TO ENSURE THEY ARE WATER-TIGHT (HOLDING WATER), HAVE ADEQUATE SUMP CAPACITY, ALL OIL/GAS TRAPS ARE IN-PLACE, ALL GRATES AND FRAMES ARE FREE FROM STRUCTURAL DAMAGE, AND ARE DRAINING FREELY. THIS MONITORING SHALL OCCUR AT A MINIMUM OF THREE (3) MONTH INTERVALS (QUARTERLY).

2. OTHER DRAINAGE SYSTEMS SHALL BE INSPECTED TO ENSURE THAT NO EROSION IS OCCURRING AT OUTLETS, ALL OUTLETS ARE FREE-FLOWING AND NO DAMAGE HAS OCCURRED AS PART OF SITE MAINTENANCE OR ACTIVITIES.

#### **OPERATIONS:**

. GOOD HOUSE KEEPING AND MATERIAL MANAGEMENT REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORMWATER RUNOFF. A POLLUTION PREVENTION PLAN SHALL BE DEVELOPED WHICH SHALL INCLUDE THE FOLLOWING AT A MINIMUM:

A. ALL MATERIALS STORED ON-SITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER B. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL

MANUFACTURER'S LABEL. C. SUBSTANCES SHOULD NOT BE MIXED WITH ONE ANOTHER, UNLESS RECOMMENDED BY THE MANUFACTURER. D. WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF

E. THE SYSTEM'S MANAGER SHALL INSPECT THE SITE DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE, DURING ALL CONSTRUCTION PHASES F. ORIGINAL MATERIALS LABELS AND MATERIAL SAFETY DATA SHEETS SHALL BE KEPT THEY RETAIN IMPORTANT INFORMATION.

G. PETROLEUM PRODUCTS: ALL ONSITE VEHICLES AND PARKING AREAS SHALL BE REGULARLY MONITORED OR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO PREVENT

2) PETROLEUM PRODUCTS SHALL BE STORED UNDER COVER AND SHALL BE IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. H. FERTILIZERS:

1) FERTILIZERS SHALL ONLY BE USED IN THE MINIMUM AMOUNTS AS RECOMMENDED BY THE MANUFACTURER. 2) THE CONTENTS OF ANY UNUSED FERTILIZER SHALL BE TRANSFERRED TO A CLEARLY LABELED, SEALABLE PLASTIC BIN, TO AVOID SPILLAGE.

I. PAINTS, SOLVENTS. 1) ALL PAINTS AND SOLVENTS SHALL BE STORED IN ORIGINAL MANUFACTURER'S CONTAINERS IN A COVERED LOCATION.

2. SPILL CONTROL PRACTICES: A. MANUFACTURER'S RECOMMENDED METHODS SHALL BE CLEARLY POSTED FOR SPILL CLEANUP AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATIONS OF CLEANUP INFORMATION AND SUPPLIES. B. MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT ON-SITE IN A DESIGNATED MATERIAL STORAGE AREA. EQUIPMENT WILL INCLUDE, BUT NOT BE LIMITED TO, BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, ABSORBENT MATERIALS, SAND, SAWDUST AND PLASTIC & METAL TRASH CONTAINERS SPECIFICALLY

KEPT AND LABELED FOR THIS PURPOSE. ALL SPILLS WILL BE CLEANED-UP IMMEDIATELY AFTER DISCOVERY. . SPILLS OF TOXIC OR HAZARDOUS MATERIAL OR NATURE WILL BE REPORTED TO THE APPROPRIATE STATE, LOCAL OR FEDERAL AGENCY, AS REQUIRED BY-LAW. THE SPILL PREVENTION PLAN WILL INCLUDE PROVISIONS TO ADAPT THE PLAN TO ENSURE THAT SPILLS WILL NOT REOCCUR, AND HOW TO CLEANUP THE SPILL IF THERE IS ANOTHER ONE.

3. SITE OPERATIONS AND DAILY USE SHALL CONSIDER THE ULTIMATE DISPOSITION OF STORMWATER AND OTHER SITE-GENERATED FORMS OF RUNOFF. THE WASHING OF VEHICLES ON SITE BY RESIDENTS SHALL BE DISCOURAGED.

4. SNOW PLOWING - SNOW PLOWING OPERATIONS SHALL STOCKPILE SNOW, ICE AND ACCUMULATED MATERIALS IN AREAS WHERE SNOW MELT WILL FLOW INTO THE ON-SITE DRAINAGE SYSTEMS, INCLUDING DRAINAGE BASINS. NO PLOWING OR STORAGE OF SNOW INTO WETLANDS OR

SALT USE SITE-WIDE SHALL BE APPLIED TO THE MINIMUM EXTENT POSSIBLE TO MAINTAIN SAFE CONDITIONS, AND ONLY IF NOT SPECIFICALLY EXCLUDED BY ANY SPECIAL CONDITIONS.

#### MAINTENANCE:

1. DRIVEWAYS SHALL BE SWEPT CLEAN OF DEBRIS AND ACCUMULATION ON A REGULAR BASIS. AT A MINIMUM, A SPRING AND FALL CLEANING SCHEDULE IS RECOMMENDED. 2. ALL CATCHBASINS SHALL HAVE THE SUMPS CLEANED AT ANY TIME OF THE YEAR WHEN 2' OR LESS SPACE EXISTS BELOW THE OUTLET INVERT, OR A MINIMUM OF ONCE PER YEAR, REGARDLESS OF SUMP ACCUMULATION. ALL DEBRIS FROM THE CLEANING SHALL BE DISPOSED OF OFF-SITE AND IN A MANNER AS PROSCRIBED BY LAW. 3. ALL HYDROCARBON TRAPS SHALL BE CHECKED FOR PHYSICAL INTEGRITY AND SEALED IMMEDIATELY AFTER EACH CATCHBASIN CLEANING.

4. OIL ABSORBING "PILLOWS" OR OTHER MEANS SHALL BE USED TO REMOVE ACCUMULATIONS OF HYDROCARBONS (OIL/GREASE) IN CATCHBASINS THAT ARE REGULARLY OBSERVED TO CONTAIN HYDROCARBONS, WHICH DO NOT EVAPORATE BETWEEN INSPECTIONS. 5. ALL BROKEN, LEAKING OR OTHERWISE DAMAGED STRUCTURES SHALL BE REPAIRED PROMPTLY UPON DISCOVERY. CATCHBASIN GRATES OR MANHOLE LIDS SHALL BE REPLACED WITH SIMILAR WEIGHT AND LOADING CHARACTERISTIC REPLACEMENT PARTS. 6. ALL EROSION SHALL BE REPAIRED. THE REPLACEMENT OF ANY PIPE OR DRAINAGE STRUCTURE SHALL MATCH THE ORIGINAL DESIGN SPECIFICATIONS.

#### NPDES GENERAL NOTES:

1. THE DISTURBANCE OF THIS SITE IS LESS THAN 1 ACRE AND IS NOT SUBJECT TO NPDES REQUIREMENTS.

# EROSION & SEDIMENTATION CONTROL PLAN

#### GENERAL:

THIS PLAN IS PART OF A SET OF DOCUMENTS THAT ARE TO BE VIEWED AND REVIEWED IN THEIR ENTIRETY, SUCH DOCUMENTS INCLUDE THE CONSTRUCTION SPECIFICATIONS, CONSTRUCTION PLANS AND ANY PERMITS ISSUED BY THE TOWN OR OTHER REGULATORY

#### EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT EROSION AND SEDIMENTATION ARE CONTROLLED. THIS PLAN SHALL BE SHALL BE ADAPTED TO FIT THE CONTRACTOR'S EQUIPMENT, WEATHER CONDITIONS, AND ANY CONDITIONS ISSUED BY THE

2. THE MOST IMPORTANT ASPECTS OF CONTROLLING EROSION AND SEDIMENTATION ARE LIMITING THE EXTENT OF DISTURBANCE AND STABILIZING SURFACES AS SOON AS POSSIBLE. OF SECONDARY IMPORTANCE IN EROSION CONTROL IS THE LIMITING THE SIZE AND LENGTH OF THE TRIBUTARY DRAINAGE AREA WITHIN THE WORK SITE AND DRAINAGE STRUCTURES. THESE FUNDAMENTAL PRINCIPLES SHALL BE THE KEY FACTOR IN THE CONTRACTOR'S CONTROL OF EROSION ON THE SITE.

3. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY DIVERSION SWALES AND SETTLING BASINS IN AREAS OF FUTURE CONSTRUCTION. CONSTRUCTION IS PERMITTED BEYOND THE LIMIT OF DISTURBANCE ONLY WHEN ADDITIONAL DRAINAGE MEASURES OR STABILIZATION MEASURES ARE NEEDED, AND SHALL BE SUBJECT TO APPROVAL BY THE TOWN, PRIOR TO WORK OUTSIDE OF DESIGNATED LIMIT OF DISTURBANCE LINE. THE LIMIT OF DISTURBANCE LINE SHALL BE THE EROSION CONTROL BARRIER.

4. ALL DISTURBED SURFACES SHALL BE STABILIZED A MINIMUM OF 14 DAYS AFTER CONSTRUCTION IN ANY PORTION OF THE SITE HAS CEASED OR IS TEMPORARILY HALTED UNLESS ADDITIONAL CONSTRUCTION IS INTENDED TO BE INITIATED WITHIN 21 DAYS.

5. THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE AND REPAIR OF ALL EROSION CONTROL DEVICES ON-SITE. ALL EROSION CONTROL DEVICES SHALL BE REGULARLY INSPECTED. ANY SEDIMENTS REMOVED FROM THE CONTROL DEVICES SHALL BE DISPOSED OF OUTSIDE OF THE 100' WETLANDS BUFFER ZONE.

6. AT NO TIME SHALL SILT-LADEN WATER BE ALLOWED TO ENTER SENSITIVE AREAS (OFF-SITE AREAS AND DRAINAGE SYSTEMS). ANY RUNOFF FROM DISTURBED SURFACES SHALL BE DIRECTED THROUGH SETTLING BASINS AND EROSION CONTROL BARRIERS PRIOR TO ENTERING ANY SENSITIVE AREAS.

#### PRELIMINARY SITE WORK:

1. MATERIAL REMOVED SHOULD BE IMMEDIATELY REMOVED FROM THE SITE AND SHOULD

2. IF INTENSE RAINFALL IS ANTICIPATED, THE INSTALLATION OF SUPPLEMENTAL HAYBALE DIKES, SILT FENCES, OR ARMORED DIKES SHALL BE UTILIZED.

3. IF THE SITE CONSTRUCTION OCCURS AT ANY TIME OTHER THAN THE MAY -NOVEMBER CONSTRUCTION SEASON, THE SITE DRAINAGE SYSTEM SHALL BE INSTALLED, MAINTAINING HYDRAULIC CAPACITY, PRIOR TO ANY ROUGH GRADING.

#### DRAINAGE SYSTEM:

1. A SILT FENCE SHALL BE INSTALLED AT THE OUTFALL OF ALL TEMPORARY BASINS AND SWALES. IT SHALL REMAIN IN PLACE UNTIL ALL TRIBUTARY AREAS ARE STABILIZED. 2. WATER SHALL NOT BE ALLOWED TO ENTER PIPES FROM UN-STABILIZED SURFACES.

3. Trench excavations shall be limited to the minimum length required for DAILY PIPE INSTALLATION. ALL TRENCHES SHALL BE BACKFILLED AS SOON AS POSSIBLE THE ENDS OF PIPES SHALL BE CLOSED NIGHTLY WITH PLYWOOD AND BACKER BOARD.

4. IF UNSTABLE AREAS ARE ENCOUNTERED DUE TO NATURAL SPRINGS OR GROUNDWATER BREAKOUT, INTERCEPTOR DRAINS SHALL BE INSTALLED TO DIRECT THE RUNOFF INTO THE DRAINAGE SYSTEM, SEE DETAILS.

5. IT IS IMPORTANT THAT THE BINDER COURSE, WITH BERMS, BE INSTALLED ON THE LIMITS OF THE PAVED AREAS AS SOON AS FEASIBLE AS THESE AREAS WILL FUNCTION AS

#### INSTALLATION OF UTILITIES:

CARE SHALL BE TAKEN TO ASSURE THAT THE UTILITY TRENCHES DO NOT CHANNELIZE RUNOFF TOWARDS EXISTING STREETS OR OTHER OFF—SITE AREAS.

2. THE INSTALLATION OF SUBSURFACE UTILITIES AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS.

3. TRENCH EXCAVATIONS SHALL BE LIMITED TO THE MINIMUM LENGTH REQUIRED FOR DAILY UTILITY INSTALLATION. ALL TRENCHES SHALL BE BACKFILLED AS SOON AS

#### LANDSCAPING:

1. LANDSCAPING SHALL OCCUR AS SOON AS POSSIBLE TO PROVIDE PERMANENT STABILIZATION OF DISTURBED SURFACES.

2. CONTRACTOR SHALL UTILIZE A VARIETY OF SLOPE STABILIZATION METHODS AND MATERIALS WHICH SHALL BE ADJUSTED TO THE SITE CONDITIONS. EROSION CONTROL BLANKETS OR MIRAFI MIRAMAT (OR SIMILAR PRODUCTS) SHALL BE AVAILABLE ON SITE.

3. IF THE SEASON OR ADVERSE WEATHER CONDITIONS DO NOT ALLOW THE ESTABLISHMENT OF VEGETATION, TEMPORARY MULCHING WITH HAY, TACKIFIED WOOD CHIPS OR OTHER METHODS SHALL BE PROVIDED. IN AREAS OF STEEP SLOPES, TEMPORARY STABILIZATION WITH STUMP GRINDINGS SHOULD BE CONSIDERED.

4. A MINIMUM OF 6" TOPSOIL SHALL BE PLACED AND ITS SURFACE SMOOTHED TO THE SPECIFIED GRADES.

5. SEED APPLICATIONS SHALL BE IN ACCORDANCE WITH THE GRASS AND SLOPE COVER PRE-CONSTRUCTION:

1. AN EROSION CONTROL BARRIER SHALL BE INSTALLED AS DEPICTED ON THE SITE PLAN, BETWEEN THE AREAS TO BE DISTURBED AND WETLAND AREAS. THIS BARRIER SHALL REMAIN IN PLACE UNTIL ALL TRIBUTARY SURFACES HAVE BEEN FULLY STABILIZED. THE EROSION CONTROL BARRIERS AS SHOWN ON THE SITE PLAN ARE THE MINIMUM REQUIRED TO PROTECT THE ON & OFF SITE DRAINAGE SYSTEMS.

2. PHOTOGRAPHS AND/OR VIDEO IMAGES OF THE PRE-CONSTRUCTION CONDITION OF THE SITE AND SURROUNDING AREAS, ESPECIALLY THE ADJACENT STREETS SHALL BE TAKEN. PRINTED AND DATED. A COPY OF THESE MATERIALS SHALL BE SUBMITTED TO THE TOWN AND OWNER FOR THEIR FILES. THESE PICTURES AND IMAGES SHALL REFERENCE EXISTING SITE CONDITIONS AND PERMANENT REFERENCE MARKS TO ENABLE RECOGNITION OF THE AREA BEING PHOTOGRAPHED, AND SHALL REPRESENT A COMPREHENSIVE VIEW OF THE SITE PRIOR TO DEVELOPMENT.

3. THE CONTRACTOR SHALL ESTABLISH A STAGING AREA ON A PORTION OF THE AREA TO BE DISTURBED FOR THE OVERNIGHT STORAGE OF EQUIPMENT AND STOCKPILING OF MATERIALS. THE STAGING AREA SHALL BE OUTSIDE OF THE 100' WETLANDS BUFFER ZONE.

4. IN THE STAGING AREA, THE CONTRACTOR SHALL HAVE A STOCKPILE OF MATERIALS REQUIRED TO CONTROL EROSION ON—SITE TO BE USED TO SUPPLEMENT OR REPAIR EROSION CONTROL DEVICES. THESE MATERIALS SHALL INCLUDE, BUT ARE NOT LIMITED TO: HAYBALES, SILT FENCE AND CRUSHED STONE.

5. THE CONTRACTOR IS RESPONSIBLE FOR EROSION CONTROL ON SITE AND SHALL UTILIZE EROSION CONTROL MEASURES WHERE NEEDED, REGARDLESS OF WHETHER THE MEASURES ARE SPECIFIED HEREIN, ON THE PLAN OR IN ANY ORDER OF CONDITIONS.

#### GENERAL CONSTRUCTION REQUIREMENTS:

1. ANY REFUELING OF CONSTRUCTION VEHICLES AND EQUIPMENT SHALL TAKE PLACE OUTSIDE OF THE 100 FOOT BUFFER ZONE TO THE ENTRANCE TO THE DRAINAGE SYSTEM AND SHALL NOT BE CONDUCTED IN PROXIMITY TO SEDIMENTATION BASINS OR DIVERSION

2. THE BURIAL OF STUMPS, CONSTRUCTION DEBRIS OR OTHER MATERIALS SHALL NOT

3 NO MATERIALS SHALL RE DISPOSED OF INTO THE EXISTING OR PROPOSED DRAINAGE SYSTEMS. ALL CONTRACTORS INCLUDING: CONCRETE SUPPLIERS, PAINTERS AND PLASTERERS, SHALL BE INFORMED THAT THE CLEANING OF EQUIPMENT IS PROHIBITED IN AREAS WHERE THE WASH—WATER WILL DRAIN DIRECTLY TO THE SITE DRAINAGE SYSTEMS.

4. CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL WHICH SHALL INCLUDE STREET SWEEPING OF ALL PAVED SURFACES WITHIN THE SITE AND OFF-SITE AREAS THAT ARE IMPACTED BY SITE CONSTRUCTION ON A REGULAR BASIS, AS NEEDED.

. RAINGARDENS SHALL BE PROTECTED FROM COMPACTION DURING CONSTRUCTION AND NOT USED AS A STAGING AREA.

1"x1"x24" STAKE-

STRAW -

WATTLE

DEPTH

1' MIN.

**SECTION** 

# PERMIT SET 6-4-2019(REV)

## EROSION CONTROL AND DRAINAGE SYSTEM **OPERATIONS**

LOCATION: 22-24 MAIN STREET MAYNARD, MASSACHUSETTS

PREPARED FOR GreenStar

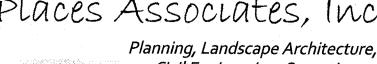
SCALE: AS NOTED

DATE: JUNE 4, 2019

GreenStar

HERBALS

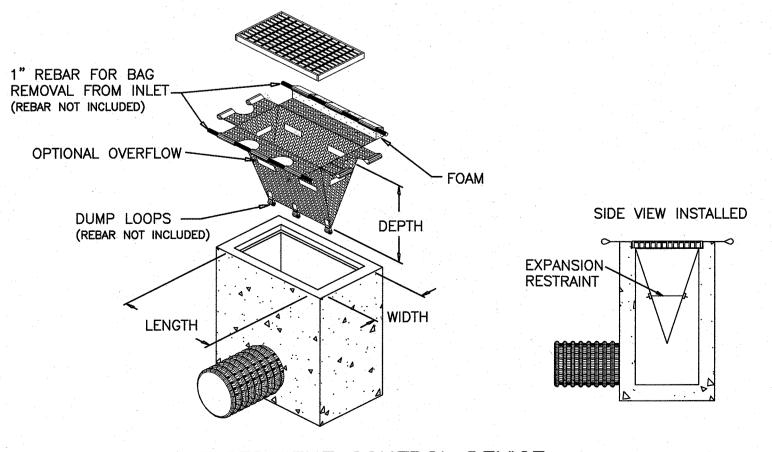
Places Associates, Inc.





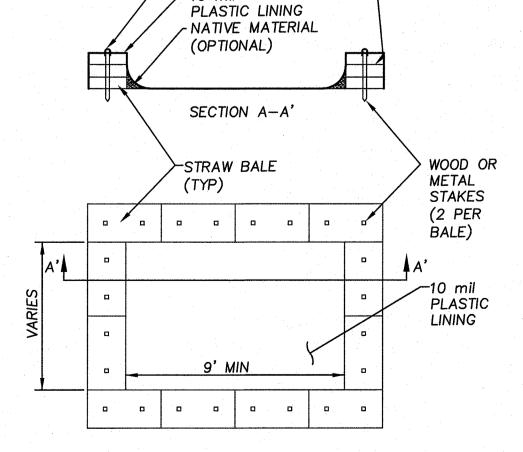
PLAN No. C-6

PROJECT No.: 5390



INLET SEDIMENT CONTROL DEVICE

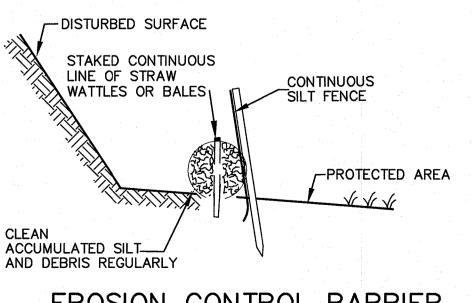
NOT TO SCALE



STAPLES (2 PER BALE)

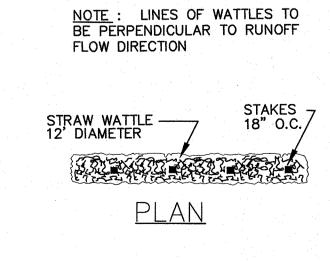
BINDING WIRE

ABOVE GRADE CONCRETE WASHOUT



EROSION CONTROL BARRIER

NOT TO SCALE



STRAW WATTLES NOT TO SCALE

REVISED 6-4-19 THIS SHEET ADDED

